



**UNIVERSITI PUTRA MALAYSIA**

**CREATIVE CLIMATE AND LEARNING ORGANIZATION: FACTORS  
CONTRIBUTING TO INNOVATION WITHIN THE PRIVATE SECTOR**

**MERIAM ISMAIL**

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**DOCTOR OF PHILOSOPHY  
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CONTRIBUTING TO INNOVATION WITHIN THE PRIVATE SECTOR**

**By**

**MERIAM ISMAIL**

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**CREATIVE CLIMATE AND LEARNING ORGANIZATION: FACTORS  
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By

**MERIAM ISMAIL**  
**October 2002**

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Studies on innovation have suggested that organizational creative climate tends to play an important role and is a predictor for innovation. However, lately, the presence of a learning culture in organization tends to equally explain a considerable influencing effect on innovation too. This particular study examined the influence of both those variables on innovation and to determine which one of the two could be a better predictor for innovation. The results indicated that both learning culture and creative climate have significant contribution of 58.5% to the explanation of the observed variances in the innovation construct. The learning organization culture separately was found to have a significant stronger relationship with innovation ( $r = .733$ ) than did the creative climate ( $r = .473$ ) which implied a larger contribution from the learning organization variable towards innovation. Two learning organization dimensions contributed most to the variances in innovation especially the dimensions of 'Embedded Systems' and 'Systems Connection' which have significant high predictive powers on innovation (Beta = .397,  $p = .000$ ; Beta = .313,  $p = .000$  respectively) occurring within the sampled organizations as

compared to the ten creative climate factors and the rest of the five learning organization dimensions. The study also found that both the creative climate and learning organization factors jointly contributed higher with significance ( $p = .000$ ) at 67.6% to the explanation of the observed variances in innovation for the MNCs ( $R^2 = .676$ ,  $F = 14.427$ ) than for the local organizations at 60.2% ( $R^2 = .602$ ,  $F = 7.476$ ).

This study involved a sample of eighteen private organizations across various core businesses, manufacturing, finance and insurance, consulting, property developing, engineering, telecommunication, and education services, either local organizations or MNCs within the Federal territory of Kuala Lumpur. The size of the respondents is 259.

In addition, the findings showed that there were no significant differences in the mean scores ( $p > .05$ ) among the three organizational job levels namely the top management, middle management and staff, in the members' perceptions on innovation, creative climate and learning culture. The study also found no significant differences in the mean scores ( $p > .05$ ) among the small, medium, large and very large organizational population sizes in the members' perceptions on innovation, creative climate and learning culture.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi sebahagian daripada keperluan untuk ijazah Doktor Falsafah

**IKLIM KREATIF DAN ORGANISASI PEMBELAJARAN: FAKTOR-FAKTOR  
YANG MENYUMBANG KEPADA INOVASI DI KALANGAN ORGANISASI  
SWASTA**

Oleh

**MERIAM ISMAIL**

**Oktober 2002**

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Beberapa kajian telah mengenengahkan bahawa iklim kreatif boleh memainkan peranan penting sebagai peramal inovasi. Walau bagaimanapun kebelakangan ini dengan kehadiran budaya pembelajaran di organisasi boleh juga menjelaskan sebahagian besar kesan pengaruhnya terhadap inovasi. Kajian ini cuba menguji pengaruh kedua-dua pembolehubah itu ke atas inovasi dan menentukan yang mana di antara keduanya boleh membawa pengaruh yang lebih besar terhadap inovasi. Hasil dapatan menunjukkan bahawa kedua-dua budaya pembelajaran dan iklim kreatif organisasi telah dengan signifikannya menyumbang sebanyak 58.5% ( $F = 19.980$ ,  $p = .000$ ) kepada varians inovasi. Budaya organisasi pembelajaran telah didapati mempunyai perkaitan yang tinggi dan signifikan dengan inovasi ( $r = .733$ ,  $p = .000$ ) berbanding iklim kreatif organisasi ( $r = .473$ ,  $p = .000$ ). Dua dimensi budaya organisasi pembelajaran menjadi penyumbang terbesar ke atas inovasi khasnya dimensi 'Sistem Tertanam' ( $Beta = .397$ ,  $p = .000$ ) dan 'Kaitan Sistem' ( $Beta = .313$ ,  $p = .000$ ) yang mempunyai kuasa peramal tinggi ke atas inovasi yang berlaku dalam lingkungan organisasi sampel berbanding dengan sepuluh

faktor iklim berkreaitif dan lima dimensi organisasi pembelajaran yang lain. Kajian ini juga mendapati bahawa gabungan kedua-dua set faktor iklim kreatif dan organisasi pembelajaran mempunyai pengaruh yang lebih tinggi sebanyak 67.6% dan signifikan ( $p = .000$ ) ke atas penjelasan varians inovasi di kalangan syarikat asing bertaraf antarabangsa ( $R^2 = .676$ ,  $F = 14.427$ ) berbanding syarikat swasta tempatan sebanyak 60.2% ( $R^2 = .602$ ,  $F = 7.467$ ).

Kajian ini melibatkan lapan belas sampel organisasi swasta merentasi beberapa jenis perniagaan teras seperti pembuatan, kewangan dan insurans, rundingcara, telekomunikasi, pembangunan hartanah, kejuruteraan dan perkhidmatan pendidikan yang bertaraf antarabangsa atau organisasi tempatan. Saiz responden ialah 259 orang.

Selain pada itu, hasil dapatan juga menunjukkan bahawa tiada perbezaan yang signifikan pada skor min persepsi pekerja ( $p > .05$ ) di kalangan tiga peringkat pekerjaan samada peringkat pengurusan atasan, pengurusan peringkat pertengahan atau peringkat pekerja terhadap inovasi, iklim berkreaitif atau budaya pembelajaran. Juga didapati tiada perbezaan yang signifikan pada skor min ( $p > .05$ ) di kalangan organisasi sampel yang mempunyai saiz populasi kecil, sederhana, besar atau paling besar.

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Meriam

I certify that an Examination Committee met on the 11<sup>th</sup> October 2002 to conduct the final examination of Meriam Ismail on her Doctor of Philosophy thesis entitled “Creative Climate and Learning Organization: Factors Contributing to Innovation Within the Private Sector” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

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## DECLARATION

I hereby certify that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any degree at the UPM or other institutions.



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**MERIAM ISMAIL**

Date: 20 November 2002

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## **LIST OF ABBREVIATIONS**

ASEAN	Association of South East Asian Nations
CC	Creative Climate
CEO	Chief Executive Officer
DDI	Development Dimensions International
HRD	Human Resource Development
ICT	Information Communication and Technology
IDEAL	Institute on Distance Education and Learning
ISO	International Organization for Standardization
IT	Information technology
LO	Learning Organization
MAMPU	The Malaysian Administration Modernization and Management Planning Unit
MASTIC	Malaysian Science and Technology Information Centre
MNC	Multinational Corporation
NIC	Newly Industrialized Countries
OD	Organizational Development
OECD	Organization for Economic Co-operation and Development Statistical Office of the European Communities
QCC	Quality Control Circle
SIRIM	Standards and Industrial Research Institute of Malaysia
SOL	Society of Learning Organization
SPC	Statistical Process Control
TMT	Top Management Team
TQM	Total Quality Management
UNDP	United Nations Development Project
WTO	World Trade Organization

# CHAPTER I

## INTRODUCTION

### **Background of the Study**

Upon reading a biographical book about the late Mary Kay who had successfully built a business empire well known throughout the world, I came across the powerful statement by the lady herself, who, among other things said “In today’s fast-changing, highly competitive world, standing still is the same as moving backward.” (Mary Kay, 1996, p. 151). Even though the statement was made in the middle of 1990’s where globalization in terms of doing business was not yet extensively known, it was timely and reflects how forward looking the lady was then. Perhaps now that globalization is in full swing in this millennium and the years ahead, the statement would be more relevant than ever.

Realizing this, I decided to satisfy my curiosity in searching for a deeper meaning to that simple statement of about ten words. The simple statement could mean as an indirect caution to everyone from housewives and more so to those in the business sector which intend members representing an organization not to be complacent and comfortable with their present achievements but to keep making positive changes to stay abreast with the continuous environmental changes occurring. This was when I strongly felt the words ‘innovation’ and ‘entrepreneurship’ become important. To keep abreast with the current changes, organizations then have no other alternative but to innovate; it

means the members of organizations be it public, private or non-government, have to live the word and make it as one's philosophy in life in this millennium.

## **The Problem and Its Context**

### **Global Challenges**

Organizations that are going to stay ahead and gain competitive advantage in this unpredictable environment are those that are more focused (Goss, Pascale and Athos, 1993; Martin, 1993), fast, flexible and friendly (Kanter, 1994). A sustainable competitive advantage occurs when an organization implements a value-creating strategy of which other organizations are not able to duplicate the benefits or would find it too costly to imitate (Hitt, Ireland and Hoskisson, 1999; Thomson, 2001). By achieving strategic competitiveness and successfully exploiting its competitive advantage, an organization is able to accomplish its primary objective, which is the earning of above average returns. Above average returns are the returns in excess of what an investor expects to earn from other investments with similar amount of risks (Hitt et al., 1999). A risk is an investor's uncertainty about the economic gains or losses which will result from a particular investment. Thus, the most important thing that leaders can help their organizations in is mastering the changes occurring (Kanter, 1994; Kotter, 1995) because the conditions under which businesses and governments are functioning today are more turbulent, chaotic, and more challenging than ever before under the global environment. Globalization is a process of change stemming from a combination of increasing cross-border activity and information technology enabling virtually instantaneous communication worldwide (Kanter, 1995). It also means the spread of economic innovations around the world and the political and cultural adjustments that accompany

this diffusion (Hitt et al., 1999, p. 12). Globalization promises to give everyone everywhere access to the world's best. Change efforts then, should be embraced by every employee in an organization and managers henceforth, should involve the employees down the line in the planning as well as in the implementation of change in the first place.

### **Towards Innovation**

There is a substantial body of evidence that innovation can be considered as a dominant factor in national economic growth and international patterns of trade, while at the micro level (within organizations), Research and Development (R&D) is seen as enhancing an organization's activity to absorb and make use of new technologies of all kinds (Freeman, 1994; Organization for Economic Co-operation and Development [OECD], 1997). R&D activities are "seen as enhancing an organization's capacity to absorb and make use of new knowledge of all kinds, not just technological knowledge" (OECD, 1997, p. 2). French and Bell, Jr. (1995) consider three elements to ensure continuous innovation in organizations; these are empowering employees, encouraging employee participation and employee involvement. Innovation in the public sector is typically evolutionary and is not produced from scratch (Sahlman and Stevenson, 1991) while in the corporate sector, it can be both evolutionary (incremental) and revolutionary (radical) through the presence of appropriate change processes being implemented (Beer and Nohria, 2000).

The American companies and other companies globally continue to downsize their workforces in the 1990's and this change poses difficult situations for employees (Amabile and Conti, 1999). Ironically, through this downsizing emerge strength, creativity and teamwork and this phenomenon of downsizing has emphasized the



importance of innovation for long term success in these companies (Amabile and Conti, 1999). On another hand, some scholars believe that innovation for example could be one of the outcomes that result from successful change efforts (Beer and Nohria, 2000; Chain Store Age, 1998; Mensch, 1975; OECD, 1997). However, many organizations are not successful in embracing the change efforts as being confirmed by Kanter (1994). Kanter (1996), also observed and stated that “some managers experience the new managerial work as a loss of power because much of their authority used to come from hierarchical position; now that everybody seems negotiable by everyone, they are confused about how to mobilize and motivate staff” (p. 182).

Based on the argument by Beer and Nohria (2000) and several other scholars alike, it is then crucial for an organization adopting change efforts either incremental transformation (evolutionary) or otherwise (revolutionary) to have the suitable organizational environment (context) in order to provide facilitative ground in ensuring the success of the transformation to germinate (Donnellon, 1996). For example an organization such as 3M which is noted for being innovative had since been practicing a working culture, one which emphasizes project teams. For such teams (which is synonym to team working) to proceed and continuously contribute towards innovation, Donnellon further asserts that the management of 3M has no doubt been providing the necessary organizational context (such as managerial support, line of reporting, strategic goals, appraisal and rewards to name a few) to allow for such working culture to grow and prosper. The organizational environment which 3M provides in the work place is one which supports team working in every way. This has been observed by Donnellon (1996) in her study on specific selected innovative organizations which includes 3M. The crucial